

(d) Shows any modifications necessary to a containment system that is to be separated as prescribed under Part 150 of this subchapter, or §§ 153.525 and 153.1020;

(e) Emphasizes the piping and equipment described in paragraphs (a), (b) and (d) of this section by using contrasting colors, line widths, or similar methods; and

(f) Shows the cargo loading rates chosen under § 153.365(b) for all applicable cargo lines.

[CGD 73–96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 78–128, 47 FR 21210, May 17, 1982]

§ 153.912 Certificate of inhibition or stabilization.

(a) When a cargo in Table 1 is referred to this section, no person may operate a tankship carrying the cargo without a written certification, carried on the bridge of the tankship, from the shipper that the cargo is:

- (1) Inhibited; or
- (2) Stabilized.

(b) The certification required by this section must contain the following information:

- (1) Whether the cargo is inhibited or stabilized.
- (2) The name and concentration of the inhibitor or stabilizer.
- (3) The date the inhibitor or stabilizer was added.
- (4) The length of time the inhibitor or stabilizer is effective.
- (5) Any temperature limitations qualifying the inhibitor's or stabilizer's effective lifetime.
- (6) The action to be taken should the duration of the voyage exceed the inhibitor's or stabilizer's useful life.

GENERAL CARGO OPERATIONAL REQUIREMENTS

§ 153.920 Cargo quantity limitations.

(a) No person may load a cargo tank or operate a tankship that carries a cargo tank containing in excess of 1250 m³ (approx. 44,138 ft³) of cargo requiring a type I containment system.

(b) No person may load a cargo tank or operate a tankship that carries a cargo tank containing in excess of 3000 m³ (approx. 105,932 ft³) of a cargo requiring a type II containment system.

§ 153.921 Explosives.

No person may load, off-load, or carry a cargo listed in this part on board a vessel that carries explosives unless he has the prior written permission of the Commandant (G–MSO).

[CGD 73–96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 82–063b, 48 FR 4782, Feb. 3, 1983]

§ 153.923 Inerting systems.

The master shall ensure that the inert gas systems for any cargo that this part requires to be inerted are operating correctly.

GENERAL VESSEL SAFETY

§ 153.930 Cargo antidotes.

No person may operate a tankship that carries a cargo listed in Table 1 unless the tankship has on board the antidotes described for the cargo in the *Medical First Aid Guide for Use in Accidents Involving Dangerous Goods*, published by IMO.

§ 153.931 Obstruction of pumproom ladderways.

The master shall ensure that all cargo pumproom ladderways are unobstructed at all times.

§ 153.932 Goggles and protective clothing.

(a) The master shall ensure that each person wear a face mask or tight-fitting goggles for eye protection against splashing or spraying liquids if that person is:

- (1) Sampling cargo;
- (2) Transferring cargo;
- (3) Making or breaking a cargo hose connection;
- (4) Gauging a cargo tank; or
- (5) Opening a cargo tank by opening a Butterworth hatch, ullage hatch, cargo tank hatch, or similar opening.

(b) The master shall ensure that each person wear a face mask or tight-fitting goggles for eye protection against splashing or spraying liquids if the person is:

- (1) In the area of the deck where the cargo tanks, cargo piping, and cargo pumprooms are located while a cargo transfer is taking place; or
- (2) In a cargo pumproom, an enclosed space adjacent to a cargo tank, or a

space containing part of a cargo containment system.

(c) The master shall ensure that each person in paragraphs (a) and (b) of this section wear any additional protective clothing the master believes necessary to protect the person from the cargo's hazards.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 78-128, 47 FR 21210, May 17, 1982]

§ 153.933 Chemical protective clothing.

When table 1 refers to this section, the following apply:

(a) The master shall ensure that the following chemical protective clothing constructed of materials resistant to permeation by the cargo being handled is worn by all personnel engaged in an operation listed in paragraph (b) of this section:

- (1) Splash protective eyewear.
- (2) Long-sleeved gloves.
- (3) Boots or shoe covers.
- (4) Coveralls or lab aprons.

NOTE: "Guidelines for the Selection of Chemical Protective Clothing", Third Edition, 1987, available from the American Conference of Governmental Industrial Hygienists, 6500 Glenway Ave., Cincinnati, OH 45211-4438, provides information on the proper clothing for the cargo being handled.

(b) This section applies during the following operations:

- (1) Sampling cargo.
- (2) Transferring cargo.
- (3) Making or breaking cargo hose connections.
- (4) Gauging a cargo tank, unless gauging is by closed system.
- (5) Opening cargo tanks.

(c) Coveralls or lab aprons may be replaced by splash suits or aprons constructed of light weight or disposable materials if, in the judgment of the master—

- (1) Contact with the cargo being handled is likely to occur only infrequently and accidentally; and
- (2) The splash suit or apron is disposed of immediately after contamination.

(d) Splash protective eyewear must be tight-fitting chemical-splash goggles, face shields, or similar items intended specifically for eye protection from chemical splashing or spraying.

(e) The master shall ensure that each person in the vicinity of an operation listed in paragraph (b) of this section or in the vicinity of tanks, piping, or pumps being used to transfer the cargo wears splash protective eyewear under paragraph (d) of this section.

[CGD 88-100, 54 FR 40042, Sept. 29, 1989; 55 FR 17276, Apr. 24, 1990]

§ 153.934 Entry into spaces containing cargo vapor.

(a) No person may enter a cargo tank, cargo handling space, pumproom or enclosed space in the cargo area without the permission of the master.

(b) Before permitting anyone to enter a cargo tank, cargo handling space, pumproom or other enclosed space in the cargo area, the master shall make sure that:

- (1) The space is free of toxic vapors and has sufficient oxygen to support life; or
- (2) Those entering the space wear protective equipment with self-contained breathing apparatus as described in §153.214(b) and an officer closely supervises the entire operation.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 78-128, 47 FR 21210, May 17, 1982]

§ 153.935 Opening of tanks and cargo sampling.

(a) Except as provided in paragraph (b) of this section, the master shall ensure that all cargo tank hatches, ullage openings, and tank cleaning openings are tightly closed at all times.

(b) The master may not authorize the opening of a cargo tank, except:

- (1) To clean a tank;
- (2) To transfer a cargo that Table 1 allows in a containment system having an open gauging system;
- (3) To sample a cargo that Table 1 allows in a containment system having an open gauging system; or
- (4) To sample a cargo that Table 1 allows in a containment system having a restricted gauging system if:
 - (i) The tank is not being filled during sampling;
 - (ii) The vent system has relieved any pressure in the tank;
 - (iii) The person sampling the cargo wears the protective clothing required during cargo transfer; and